

# AHERA ASBESTOS INSPECTION & MANAGEMENT PLAN

for

Sterling Morton Elementary School 9292 Jordan Road Mentor, Ohio

**April 2010** 



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#### PART I

**BUILDING INSPECTION/REINSPECTION REPORT** 



## AHERA ASBESTOS HAZARD EMERGENCY RESPONSE ACT

#### LOCAL EDUCATIONAL AGENCY Sterling Morton Elementary School

## SPECIAL PROVISIONS CERTIFICATION

#### REINSPECTION AND ASSESSMENT:

I hereby certify that the reinspection and asbestos assessments that I have reviewed as prepared by others, for this Local Educational Agency (LEA):

## Sterling Morton Elementary School 9292 Jordan Road Mentor, Ohio

	d according to the requirements of U.S. Environmen ny knowledge and belief:	ital Protec	tion Agency regulation 40 CFR Subpart E;
to the best of h	ny knowledge and belief:		
by	Jan Jan	this	8 <sup>th</sup> day of <u>APRIL</u> , 20 <u>10</u>
PRIN	T NAME: SCOTT LANDIS		
TITL	E: Certified Asbestos Hazard Evaluation Specialis	<u>t</u>	
ACCI	REDITATION: Building Inspector / Management P	lanner	
	BI-700 / MP-674 COURSE	OHIO STATE	2



Asbestos Building Inspector Refr

Certificate

This is to certify

es Scott C Landis V EA Group 7118 Industrial Park Blvd Mentor DH 44060

> his certification is issued purplant to Chapter 3710 of the Revised Code and 3701-34 of the Ohlo Administrative Code

State of Ohio Department of Health Division of Quality Assurance - Asbestos Program

> Certification Card is not valid if altered

Scott Landis

XXX-XX-(b) (6)

has attended and successfully completed the Asbestos Hazard Emergency Response Act mandatory course for the Asbestos Building Inspector Refresher and has passed an examination in that course with a minimum score of 70% or better. Training was in accordance with 40 CFR Part 763 (AHERA). The above student received the requisite training for asbestos accreditation under Title II of the Toxic Substances Control Act and State of Indiana requirements under 326 IAC 18-2 and Chapter 3701-34 Ohio Administrative Code.

Dough D, Selfer

4/9/10

4/9/09

4/9/09

Cleveland,OH

Training Manager

Expiration Date

Date(s) of Course

Examination Date

Course Location

TSI

33150 Lakeland Blvd. Cleveland, OH 44095 1-866-666-8438

9 TSI 30745 ir



Asbestos Management Planner Refresher

Certificate

This is to certify

Scott Landis

XXX-XX(b) (6)

(b) (6)

has attended and successfully completed the Asbestos Hazard Emergency Response Act mandatory course for the Asbestos Management Planner Refresher and has passed an examination in that course with a minimum score of 70% or better. Training was in accordance with 40 CFR Part 763 (AHERA). The above student received the requisite training for asbestos accreditation under Title II of the Toxic Substances Control Act and State of Indiana requirements under 326 IAC 18-2 and Chapter 3701-34 Ohio Administrative Code.

Dough D. Selfon

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Expiration Date

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Course Location

TS!

33150 Lakeland Blvd. Cleveland, OH 44095 1-866-666-8438

9 TSI 30746 mpr



#### 1.0 INTRODUCTION

EA Group, Mentor, Ohio was contracted by Mentor Public Schools to conduct a survey for asbestos-containing materials (ACMs) in Sterling Morton Elementary School, consistent with the Asbestos Hazard Emergency Response Act (AHERA). The purpose of this inspection was to: 1) to assess material condition and the potential for disturbance of previously identified suspect ACMs; 2) to recommend appropriate strategies to control or eliminate potential problems; and, 3) to develop an updated Asbestos Management Plan.

This Asbestos Inspection/Management Plan report is a two-part document that details the inspection and reinspection process (Part I) and the Management Plan objectives and responsibilities (Part II) for Sterling Morton Elementary School.

Section  $\underline{2}$  of Part I includes descriptions of inspection and reinspection procedures and material evaluation and assessment methods used during the inspection and reinspection process. This section also explains how estimates were derived for those areas found to be treated or covered with ACM.

Section 3 of Part I provides information and summary tables for Sterling Morton Elementary School. <u>Table 3-1</u>, the "Inventory of Asbestos-Containing Materials", identifies those building materials at Sterling Morton Elementary School that either tested positive for asbestos or were assumed to be asbestos-containing. These materials are inventoried by location, ACM type and homogeneous area (material).

Appendix A contains the floor plan(s) for the school.

Appendix B contains results for suspect ACMs that have been sampled and analyzed.

Appendix C contains the AHERA Three-Year Reinspection Sheet forms.

Appendix <u>D</u> contains the AHERA Asbestos 6-Month Periodic Surveillance Data Sheet forms.



## 2.0 INSPECTION PROCEDURES and METHOD of SAMPLE COLLECTION and ANALYSIS

#### 2.1 Inspection Procedures

The inspection of Sterling Morton Elementary School was scheduled and conducted by EA Group to gather the information needed to develop the School's original Asbestos Inspection/Management Plan. EA Group used field inspectors who were trained in the recognition, sampling, and evaluation of ACM.

Upon arrival, the EA Group inspector conducted a cursory review of the available floor plans to identify those building components that might potentially contain asbestos. This information helped to familiarize the inspector with the building itself, and with the locations of suspect building components

The EA Group inspector then conducted a walk-through inspection of the entire building during which all accessible areas were visually inspected for the presence of suspect ACM. Samples of some suspect materials were also collected and submitted to EA Group's analytical laboratory for analysis. If building areas or components contained suspect materials, standard forms were used to record pertinent information about the material and the building environment.

#### 2.2 Method of Sampling and Analysis

#### 2.2.1 Bulk Sample Collection Methods

During the initial inspection, representative samples of some suspect materials were collected for analysis. The materials sampled were typically limited to friable materials that had a relatively high potential for disturbance (e.g., drop ceiling panels, acoustical plasters, spray-on insulation). All other suspect materials were considered assumed ACMs unless they were determined to be non-ACM by inspection (e.g., fiberglass pipe insulation).

#### 2.2.2 Analysis of Bulk Samples

Available results of any sample analyses are provided in Appendix B.



#### 2.3 Hazard Assessment

The EPA Decision-Tree Process is used to evaluate the then current condition of suspect asbestos-containing building materials and their potential for fiber release. This EPA Decision-Tree Process should also be used during re-inspections to re-evaluate the condition of the friable, known and assumed, asbestos-containing building materials identified during prior inspections. The objective of the Decision-Tree Process is to organize and evaluate pertinent information about asbestos-containing building materials in a systematic and consistent manor. This process provides the inspector with sufficient detail to prescribe specific methods of control (i.e., removal, encapsulation, or enclosure) for the ACMs in the facility.

The Decision-Tree Process allows the inspector to perform a subjective evaluation of a known or suspect material with regard to seven factors. These factors are presented in <u>Table 2-1</u>.

The first three factors focus on the material's condition at the time of the inspection. Evidence of deterioration, delamination, physical damage, or water damage, indicates that fiber release has occurred, is occurring, or is likely to occur in the future. Such evidence is based on the appearance of the material, and/or the presence of dislodged or crumbled material on floors or other horizontal surfaces.

Factors under the second heading reflect the potential for a future fiber release due to disturbance or erosion. Surface erosion is likely to occur when ACM is located in an air plenum or near a forced-air stream. Exposed and easily accessible materials, in locations frequented by building occupants or subject to routine maintenance activities, are more vulnerable to disturbance or damage than materials in other locations.

Tables 2-2 through 2-4, diagram the sequence of the Decision-Tree used by the inspector to organize and gather information for the decision-making process. For example, Table 2-2 presents a summary of the possible conditions of an asbestos-containing building material (i.e., Poor, Fair, Good) with a hazard ranks from 1 to 7 (e.g., 1 being good, 7 being poor). If a material is determined to be in poor condition, and is assigned a hazard rank of 7, immediate action is required as shown in Table 2-4. However, for the remaining six hazard categories, the potential for disturbance is taken into consideration depending on the condition of the material (e.g., good or



fair). Table 2-4 is provided to assist in classifying ranks, ACM condition, and potential for ACM disturbance. Depending on the potential for disturbance (i.e., low, moderate, high) specific response actions are required by AHERA as shown in Table 2-4. Table 2-3 is presented to assist in classifying the potential for disturbance into the three categories shown (i.e., low, moderate, high). The hazard ranks generated from these assessment categories were used to determine the appropriate response actions.

#### 2.4 Estimations of Material Quantity

The quantities provided in this report are estimates. While these estimates provide a usable depiction, actual amounts may vary. In addition, where small quantities are involved, a higher, minimum cost may be charged by an asbestos abatement contractor.



## TABLE 2-1. FACTORS FOR ASSESSING POTENTIAL FIBER RELEASE

#### Current Condition of ACM

- Evidence of deterioration or delamination from the underlying surface (substrata)
- Evidence of physical damage (e.g., presence of debris)
- Evidence of water damage
- Potential for Future Disturbance, Damage, or Erosion of ACM
- Proximity to air plenum or direct air-stream
- Visibility, accessibility (to building occupants and maintenance personnel), and degree of activity (air movement, vibration, movement of building occupants)
- Change in building use



#### TABLE 2-2. CLASSIFICATIONS FOR HAZARD POTENTIAL

<u>AHERA</u> <u>Hazard Rank</u>	ACM Condition	Disturbance Potential
7 .	Poor	Any
6	Fair	High
5	Fair	Moderate
4	Fair	Low
3	Good	High
2	Good	Moderate
1	Good	Low



#### **TABLE 2-3**

#### CLASSIFICATION OF THE POTENTIAL FOR DISTURBANCE

HIGH POTENTIAL ("Potential for Significant Damage")

MODERATE POTENTIAL ("Potential for Damage")

LOW POTENTIAL

(Evaluation is based on frequency of potential contact, influence of vibration, and potential for air erosion.)

#### **AHERA Definitions**

Potential for Damage

- (1) Friable ACM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.
- (2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in O&M practices, changes in occupancy, or recurrent damage.

Potential for Significant Damage

Same as potential for damage, plus:

(3) The material is subject to major or continuing disturbance, due to factors including but not limited to, accessibility or, under certain circumstances, vibration or air erosion.



TABLE 2-4
RESPONSE ACTIONS BASED ON HAZARD RANKINGS

Hazard Rank	Removal Priority	AHERA Categories	Response Actions (Required by AHERA)
7	1	Significantly Damaged	Evacuate or isolate the area if needed. Remove the ACM (or enclose or encapsulate if sufficient to contain fibers). Repair of thermal system insulation is allowed if feasible and safe. O&M required for all friable ACM.
6	2	Damaged w/ Potential for Significant Damage	Evacuate or isolate the area if needed. Remove, enclose, encapsulate, or repair to correct damage. Take steps to reduce potential for disturbance. O&M required for all friable ACM.
5	3	Damaged w/ Potential for Damage	Remove, enclose, encapsulate, or repair to correct damage. O&M required for all friable ACM.
4	4	Damaged w/ Low Potential for Damage	Remove, enclose, encapsulate, or repair to correct damage. O&M required for all friable ACM.
3	5	No Damage w/ Potential for Significant Damage	Evacuate or isolate the area if needed.  Take steps to reduce potential for disturbance. O&M required for all friable ACM.
2	6	No Damage w/ Potential for Damage	Take steps to reduce potential for disturbance. Continue O&M for all friable ACM.
1	7	No Damage w/ Low Potential for Damage	Continue O&M for all ACM until Hazard Assessment factors change.



#### 3.0 SUMMARY OF INSPECTION RESULTS

All suspect asbestos materials that were not sampled or otherwise determined to be non-ACM are assumed to be asbestos-containing unless or until tested and shown otherwise. All activities involving these materials should be in strict compliance with the requirements stipulated in AHERA.

The inspection for ACMs was reasonably non-destructive. Therefore, materials located behind walls, above solid ceilings, or in other inaccessible areas may not have been identified, assessed or quantified. If during demolition or renovation additional suspect materials are discovered, these materials should be documented and treated as asbestos-containing, unless tested otherwise.

The inventory of the known and assumed accessible ACMs are summarized on <u>Table 3-1</u>, which also provides estimated costs for abatement.



Table 3-1

Inventory of Asbestos-Containing Materials 2010

Table 1. Inventory and Estimated Cost for Removal of Known and Assumed ACMs
Sterling Morton Elementary School Mentor, Ohio
2010 Reinspection

RACMs	H.G.	Location	Units	Estimated Cost Range
Cementitious Elbows & Joints	F	Ceiling Plenum	120 EA	\$2,000 - \$3,000
		Multi-Purpose Room	12 EA	
·		Multi-Purpose Storage	7 EA	
		Boiler Room	42 EA	
		Pipe Chase	10 EA	
		Tutor Office	1 EA	
		Rear Paper Storage	2 EA	
	-	Faculty Lounge	1 EA	
		Storage Room (E Boys Restroor	3 EA	1

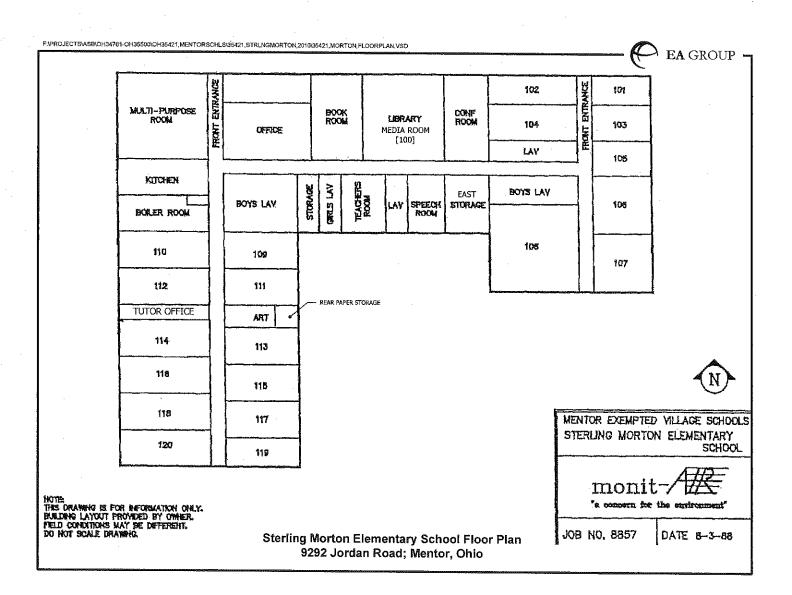
Category I & II Non-Friable	H.G.	Location	Units	Estimated Cost Range
9"x9" Floor Tile & mastic; Blue	Ā	Clinic	168 SF	\$4,300 - \$8,600
		Clinic Restroom	20 SF	1
		Classroom 110	840 SF	
		Classroom 111	840 SF	'
		Classroom 109 (Art)	1,020 SF	1
		Faculty Lounge	352 SF	1
·		Speech Room	210 SF	1
		Classroom 105	840 SF	1
9"x9" Floor Tile & mastic; Tan	В	Multi-Purpose Room	2,400 SF	\$6,700 - \$13,500
		Kitchen	336 SF	1 ' ' ' ' ' '
		Janitors Restroom	24 SF	
·		Media Room [100] (under carpe	468 SF	
		E Storage Room	140 SF	
		Classroom 104	840 SF	
		Classroom 103	840 SF	
·		Classroom 107	840 SF	1
		Classroom 108	840 SF	
9"x9" Floor Tile & mastic; Green	С	Central Office	252 SF	\$3,400 - \$6,900
		Principal's Office	168 SF	45,500
		Office Work Room	504 SF	
		Classroom 102	840 SF	
		Classroom 101	840 SF	
		Classroom 106	840 SF	1
9"x9" Floor Tile & mastic; Off-White	D	Classroom 114	840 SF	\$6,800 - \$13,700
		Classroom 116	840 SF	40,000 415,700
		Classroom 118	840 SF	1
		Classroom 120	840 SF	1
		Classroom 119	840 SF	
		Classroom 117	840 SF	1
		Classroom 115	840 SF	
		Classroom 113	840 SF	
		Art Room [prior Storage Room]	120 SF	
12"x12" Floor Tile & mastic; Blue	Е	Classroom 112	840 SF	\$840 - \$1,700
12"x12" Floor Tile & mastic; Off-White		Faculty Restroom	24 SF	\$100 - \$200
	~	Faculty Mens Restroom	28 SF	\$100 <b>-</b> \$200
		I acuity tytoms restroom	20 SF	<u> </u>

H.G. = homogeneous group

RACM = Regulated Asbestos Containing Material



## APPENDIX A SCHOOL FLOOR PLAN(S)





#### APPENDIX B

SUSPECT ACM SAMPLING RESULTS and LABORATORY REPORT(S)



#### APPENDIX C

AHERA THREE-YEAR REINSPECTION SHEET FORMS

#### AHERA ASBESTOS REINSPECTION DATA SHEET

Client: Mentor Bo	pard of Education		Building:	Sterling	Morton I	Elementa	ary S	choc	k									
Project: AHERA 3	year Reinspection 2010		Functional	Space:													·····	
Group or other I.D. No.	MATERIAL DESCRIPTION	LOCATION	Quantity	Prior Hazard Rank	Mat Type	erial Cond		USF (			STU	SE) RBA	NCE	P	PRES OTEN FO DAMA	TIAL R	Hazard Rank	Removal Priority
F	Cementitious Elbows & Joints	Ceiling Plenum	120 EA	1	T	ND				Υ	Υ	L	L,	_	-		1	7.
В .	9"x9" Floor Tile & mastic; Tan	Multi-Purpose Room	2400 SF	1	M/NF1	D	х	<del> -</del>	П	Y	Υ	м	M I	v >	:		4	4
F	Cementitious Elbows & Joints		12 EA	1	т	D	х			Υ	Υ	м	M,	γ̈ ,	+	+	4	4
F	Cementitious Elbows & Joints	Multi-Purpose Storage	7 EA	1	т	ND		1	$\Box$	Y	Υ	L	Г,	7		<del> </del>	1	7
С	9"x9" Floor Tile & mastic; Green	Central Office	252 SF	1	M/NF1	ND		+	$  \cdot  $	7	Y	м	M I	1		+	1	7
С	9"x9" Floor Tile & mastic; Green	Principal's Office	168 SF	1	M/NF1	ND	1	$\top$	$  \cdot  $	7	γ	급	L J	1,	+	<del>                                     </del>	1	7
С	9"x9" Floor Tile & mastic; Green	Office Work Room	504 SF	1	M/NF1	ND		$\dagger$	$\forall$	Y	Υ	м	М	v  >	:		1	7
А	9"x9" Floor Tile & mastic; Blue	Clínic	168 SF	1	M/NF1	ND		+	$\forall$	7	Υ	L	L I	v  >			1	7
А	9"x9" Floor Tile & mastic; Blue	Clinic Restroom	20 SF	1	M/NF1	ND		-	1	γ	Υ		LI	, ,			1	7
В	9"x9" Floor Tile & mastic; Tan	Kitchen	336 SF	1	M/NF1	ND		+	Н	7	γ	м	M I	v ,	+	-	1	7
F	Cementitious Elbows & Joints	Boiler Room	42 EA	1	Ŧ	ND		+	Ħ	7	Y	м	L,	7,	:	_	1	7
F	Cementitious Elbows & Joints	Pipe Chase	10 EA	1	T	Đ	х	x	H	γ	Υ	L	L ,	γ ,		-	4	4
В	9"x9" Floor Tile & mastic; Tan	Janitors Restroom	24 SF	1	M/NF1	ND		1.	$\Box$	7	Y	1	L I	v ,		<del> </del>	1	7
MATERIAL TYPE: S - Surfacing T - Thermal M - Miscelfaneous NF1 - Non-friable Cat. 1 NF2 - Non-friable Cat. 11 CONDITION: ND - No Damage D - Damage SD - Significant Damage	HAZARD RANK   REMOVAL PRIORITY	COMMENTS: N/A - Not previously assessed N/L - Not previously fisted N/S - Not suspect, as determined by Inspector Light fixtures w/ backings removed beto	I/C - Incorrect in U/A - Limited a ween 2003 a	ccess to m	ateria		P = Physical damage	D = Deterioration	O = Other (indicate in Comments)	Visible	Accessible	Air Movement Low/Medium/High	Activity Low/Medium/High	Low Potential Damage (LPD)	Potential Damage (PD)	Potential Significant Damage (PSD)		L
EA GROUP (440) 961-3514	7118 Industrial Park Blvd.; Mentor, OH 44060-5314	EAG Technician(s): Scott Landis Survey Date(s): April 8, 2010		CAHES	31801		! <u> </u>							H 3:		1 <u>-2</u>		

#### AHERA ASBESTOS REINSPECTION DATA SHEET

Client: Mentor B	pard of Education		Building:	Sterling	Morton I	Elementa	ry So	hool										
Project: AHERA 3	-year Reinspection 2010		Functional	Space:						· · ·								
Group or other I.D. No.	MATERIAL DESCRIPTION	LOCATION	Quantity	Prior Hazard Rank	Mat Type	erial Cond		JSE Ø MAGE		DIS	TUR	SENT (BAN) TORS	CE.	PO	RESER TENT FOR	IAL	Hazard Rank	Removal Priority
A	9"x9" Floor Tile & mastic; Blue	Classroom 110	840 SF	1	M/NF1	- ND	-		,	Y	Y	им	l N	x	AMAL	<b>3</b> C	1	7
E	12"x12" Floor Tile & mastic; Blue	Classroom 112	840 SF	1	M/NF1	ND		Ħ	寸;	γ.	ΥN	и м	I N	×			1	7
F	Cementitious Elbows & Joints	Outdoor Entry Tutor Office	1 EA	1	Т	ND			1	γ.	ΥI	LL	Υ	x			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 114	840 SF	1	M/NF1	ND			7	γ.	YN	им	ı N	×	$\Box$		1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 116	840 SF	1	M/NF1	ΝĐ			+	γ.	ΥN	и м	I N	×			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 118	840 SF	1	M/NF1	ND			٦,	γ,	Y 1	и м	I N	×			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 120	840 SF	1	M/NF1	ND		$\Box$	+	γ,	YN	и м	l N	×	$\forall$		1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 119	840 SF	1	M/NF1	ND		1	٦,	γ .	YN	и и	l N	x			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 117	840 SF	1	M/NF1	ΝĐ	$\top$		寸.	γ.	Y   1	и м	l N	x			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 115	840 SF	1	M/NF1	NĐ			寸.	γ,	YN	и м	I	×			1	7
D	9"x9" Floor Tile & mastic; Off-White	Classroom 113	840 SF	1	M/NF1	ND			+	γ,	Y I	и м	l N	x			1	7
D	9"x9" Floor Tile & mastic; Off-White	Art Room [prior Storage Room]	120 SF	1	M/NF1	ND	+		+	γ .	ΥI		N	×			1	7
F	Cementitious Elbows & Joints	Rear Paper Storage	2 EA	1 -	ή	ND		$\Box$	寸,	γ .	ΥI		Y	×			1	7
Α	9"x9" Floor Tile & mastic; Blue	Classroom 111	840 SF	1	M/NF1	ND		Ħ	寸,	γ .	YN	им	l N	×			1	7
Α.	9"x9" Floor Tile & mastic; Blue	Classroom 109 (Art)	1020 SF	1	M/NF1	D	х		+	γ.	ΥN	и м	l N	×			4	4
MATERIAL TYPE: S - Surfacing T - Thermal M - Miscellaneous NF1 - Non-friable Cat. I NF2 - Non-friable Cat. II CONDITION: ND - No Damage D - Damage SD - Significant Damage	HAZARD RANK   REMOVAL PRIORITY	COMMENTS: N/A - Not previously assessed N/L - Not previously listed N/S - Not suspect, as determined by Inspector Light fixtures w/ backings removed bet	I/C - Incorrect UA - Limited a Ween 2003 a	ccess to ma	aterial		P = Physical damage	Deterioration	O = Other (indicate in Comments)	Visible	Accessible	Activity Low/Medium/High	Friable	Low Potential Damage (LPD)	Potential Damage (PD)	Potential Significant Damage (PSD)		
EA GROUP	7118 Industrial Park Blvd.; Mentor, OH 44090-6314	EAG Technician(s): Scott Landís		CAHES	31801			1.1		$\dagger$	E	EAG	OH	354	121	×.		
(440) 951-3514		Survey Date(s): April 8, 2010								L	°ag	e 2	of	3				

#### AHERA ASBESTOS REINSPECTION DATA SHEET

Client: Mentor B	oard of Education		Building:	Sterling	Morton E	Element	ary S	Scho	ol								
Project: AHERA 3	-year Reinspection 2010		Functional	Space:													
Group or other I.D. No.	MATERIAL DESCRIPTION	LOCATION	Quantity	Prior Hazard Rank	Mat	erial Cond		AUSE AMA			stu	SEN RBA	NCE	PO	ESENT ENTIAL FOR	Hazard Rank	Removal Priority
А	9"x9" Floor Tile & mastic; Blue	Faculty Lounge	352 SF	1	M/NF1	ND				Υ	Υ	L	LN	1	MAGE	1	7
F	Cementitious Elbows & Joints		1 EA	1	Т	ND		+		Υ	Υ	М	МҮ	х		1	7
G	12"x12" Floor Tile & mastic; Off-White	Faculty Restroom	24 SF	1	M/NF1	ND		_		Υ	Y	L	LN	x		1	7
G	12"x12" Floor Tile & mastic; Off-White	Faculty Mens Restroom	28 SF	1	M/NF1	ΝD	П			Υ	Υ	L	LN	х		1	7
В	9"x9" Floor Tile & mastic; Tan	Media Room [100] (under carpet)	468 SF	1	M/NF1	ND		_	$\dagger \dagger$	N	Y	L	LN	x		1	7
А	9"x9" Floor Tile & mastic; Blue	Speech Room	210 SF	1	M/NF1	D	х		$\top$	Υ	Υ	M	ми	x		4	4
В	9"x9" Floor Tile & mastic; Tan	E Storage Room	140 SF	1	M/NF1	ND		-		Υ	Υ	L	LN	х		1	7
F	Cementitious Elbows & Joints	Storage Room (E Boys Restroom)	3 EA	1	Ť	ND		_	$\dagger \dagger$	Υ	Υ	L	LY	×		1	7
В	9"x9" Floor Tile & mastic; Tan	Classroom 104	840 SF	1	M/NF1	ND			$\dagger$	Y	Υ	М	M N	х		1	7
С	9"x9" Floor Tile & mastic; Green	Classroom 102	840 SF	. 1	M/NF1	ND		$\top$		Υ	Υ	М	M N	×		1	7
С	9"x9" Floor Tile & mastic; Green	Classroom 101	840 SF	1.	M/NF1	ND		+		Υ	Υ	М	M N	×		1	7
В	9"x9" Floor Tile & mastic; Tan	Classroom 103	840 SF	1	M/NF1	D	х	х		Υ	Υ	М	M N	x		4	4
Α	9"x9" Floor Tile & mastic; Blue	Classroom 105	840 SF	1	M/NF1	ND		1		Y	Υ	М	M N	×	_	1	7
С	9"x9" Floor Tile & mastic; Green	Classroom 106	840 SF	1	M/NF1	ΝD		T		Y	Υ	М	M N	x		1	7
В	9"x9" Floor Tile & mastic; Tan	Classroom 107	840 SF	1	M/NF1	D	х	1	$\top$	Υ	Υ	м	M N	x		4	4
В	9"x9" Floor Tile & mastic; Tan	Classroom 108	840 SF	1	M/NF1	ND				Υ	Υ	M I	M N	x		1	7
MATERIAL TYPE: S - Surfacing T - Thermal M - Miscellaneous NF1 - Non-friable Cat. 1) NF2 - Non-friable Cat. II CONDITION: ND - No Damage D - Damage SD - Significant Damage	HAZARD RANK   REMOVAL PRIORITY   1 - SD   6 - Fair w/ moderate PD   3 - D w/ PD   4 - D   3 - Good w/ high PD   5 - PSD   2 - Good w/ moderate PD   6 - PD   1 - Good w/ low PD   7 - No Problem   7 - No Proble	COMMENTS: N/A - Not previously assessed N/A - Not previously listed N/S - Not suspect, as determined by inspector Light fixtures w/ backings removed bet	VC - Incorrect L/A - Umited a Ween 2003 a	iccess to m	aterīal		P = Physical damage	W = Water damage	O = Other (Indicate in Comments)	Visible	Accessible	Air Movement Low/Medium/High	Friable Activity i ow/Medium/High	Low Potential Damage (LPD)	Potential Significant Damage (PSD)  Potential Damage (PD)		<u> </u>
EA GROUP (440) 951-3514	7118 Industrial Park Blvd.; Mentor, OH 44069-5314	EAG Technician(s): Scott Landis Survey Date(s): April 8, 2010		CAHES	31801				إبا				J G OH G of	354 3		<u></u>	-



#### APPENDIX D

AHERA ASBESTOS 6-MONTH PERIODIC SURVEILLANCE DATA SHEET FORMS

#### Mentor Public Schools

#### AHERA ASBESTOS 6-MONTH PERIODIC SURVEILLANCE DATA SHEET

#### Sterling Morton Elementary School

Inspected by:		Survey Date(s):		
CONDITION: G = Good; D = Damage	ed; SD = Significantly Damaged			

LOCATION	GROUP	MATERIAL DESCRIPTION	Quantity	Material Type	Material Condition G D St	
Ceiling Plenum	F	Cementitious Elbows & Joints	120 EA	Т		
Multi-Purpose Room	В	9"x9" Floor Tile & mastic; Tan	2400 SF	M/NF1		
Multi-Purpose Room	F	Cementitious Elbows & Joints	13 EA	Т		
Multi-Purpose Storage	F	Cementitious Elbows & Joints	7 EA	т		
Central Office	С	9"x9" Floor Tile & mastic; Green	252 SF	M/NF1		
Principal's Office	С	9"x9" Floor Tile & mastic; Green	168 SF	M/NF1		
Office Work Room	С	9"x9" Floor Tile & mastic; Green	504 SF	M/NF1		
Clinic	Α	9"x9" Floor Tile & mastic; Blue	168 SF	M/NF1		
Clinic Restroom	А	9'x9" Floor Tile & mastic; Blue	20 SF	M/NF1		
Kitchen	В	9"x9" Floor Tile & mastic; Tan	336 SF	M/NF1		
Boiler Room	F	Cementitious Elbows & Joints	42 EA	Т		
Pipe Chase	F	Cementitious Elbows & Joints	10 EA	T		
Janitors Restroom	В	9"x9" Floor Tile & mastic; Tan	24 SF	M/NF1		
Classroom 110	. А	9"x9" Floor Tile & mastic; Blue	840 SF	M/NF1		
Classroom 112	Е	12"x12" Floor Tile & mastic; Blue	840 SF	M/NF1		
Tutor Office	F	Cementitious Elbows & Joints	1 EA	Ŧ		
Classroom 114	D.	9"x9" Floor Tile & mastic; Off-White	840 SF	M/NF1		
Classroom 116	D	9"x9" Floor Tile & mastic; Off-White	840 SF	M/NF1		
Classroom 118	۵	9"x9" Floor Tile & mastic; Off-White	840 SF	M/NF1		
Classroom 120	D	9"x9" Floor Tile & mastic; Off-White	· 840 SF	M/NF1		

#### Mentor Public Schools

#### AHERA ASBESTOS 6-MONTH PERIODIC SURVEILLANCE DATA SHEET

#### Sterling Morton Elementary School

Inspected by:			Survey Date(s):	
CONDITION: G = Good; D	= Damaged; SD = Significantly D			

LOCATION	GROUP	MATERIAL DESCRIPTION	Quantity	Material Type	Co	ateri indit D	on	Describe Change
Classroom 119	D :	9"x9" Floor Tile & mastic; Off-White	840 SF	M/NF1				
Classroom 117	D	9"x9" Floor Tije & mastic; Off-White	840 SF	M/NF1				
Classroom 115	Q	9"x9" Floor Tile & mastic; Off-White	840 SF	M/NF1				
Classroom 113	D	9'x9" Floor Tile & mastic; Off-White	840 SF	M/NF1				
Art Room [prior Storage Room]	ם	9"x9" Floor Tile & mastic; Off-White	120 SF	M/NF1				
Rear Paper Storage	F	Cementitious Elbows & Joints	2 EA	Т				
Classroom 111	Α	9"x9" Floor Tite & mastic; Blue	840 SF	M/NF1				
Classroom 109 (Art)	А	9"x9" Floor Tile & mastic; Blue	1020 SF	M/NF1				:
Faculty Lounge	Α	9"x9" Floor Tile & mastic; Blue	352 SF	M/NF1				
Faculty Lounge	F	Cementitious Elbows & Joints	1 EA	т			·	
Faculty Restroom	. G	12"x12" Floor Tile & mastic; Off-White	24 SF	M/NF1				
Faculty Mens Restroom	G	12"x12" Floor Tile & mastic; Off-White	28 SF	M/NF1				
Media Room [100] (under carpet)	В	9"x9" Floor Tile & mastic; Tan	468 SF	M/NF1				
Speech Room	Α	9"x9" Floor Tile & mastic; Blue	210 SF	M/NF1				
E Storage Room	В	9'x9" Floor Tile & mastic; Tan	140 SF	M/NF1				
Storage Room (E Boys Restroom)	F	Cementitious Elbows & Joints	3 EA	Т				
Classroom 104	В	9"x9" Floor Tile & mastic; Tan	840 SF	M/NF1				
Classroom 102	С	9"x9" Floor Tile & mastic; Green	840 SF	M/NF1				
Classroom 101	С	9"x9" Floor Tite & mastic; Green	840 SF	M/NF1				
Classroom 103	В	Foil-Faced Paper in Light Fixture	840 SF	М		-		
Classroom 105	А	9"x9" Floor Tile & mastic; Blue	840 SF	M/NF1				

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PAGE 2 OF 3

#### **Mentor Public Schools**

#### AHERA ASBESTOS 6-MONTH PERIODIC SURVEILLANCE DATA SHEET

#### Sterling Morton Elementary School

Inspected by:				Survey Date(s):		
CONDITION: G=	Good; D = Damaged;	SD = Significantly Damage	1			 

LOCATION	GROUP	MATERIAL DESCRIPTION	Quantity	Material Type	Co	aterial ndition D SI	
Classroom 106	С	9"x9" Floor Tile & mastic; Green	840 SF	M/NF1	*******		
Classroom 107	В	9"x9" Floor Tile & mastic; Tan	840 SF	M/NF1			**************************************
Classroom 108	В	9"x9" Floor Tile & mastic; Tan	840 SF	M/NF1			

Only rooms/areas w/ known/assumed ACMs listed. If suspect ACMs found/installed in other areas, they should be noted here and in Plan for later inclusion in Three-Year Reinspection and 6-mos forms.



# PART II BUILDING MANAGEMENT PLAN



#### 4.0 ASSURANCE

#### 4.1 Statement of Compliance

Ι,	the LEA Designated Person for Sterling Morton
Elementary School do hereby	certify that to the best of my knowledge the School's responsibility as
•	nd as summarized in this section, are being met as stipulated in the
Asbestos Hazard Emergency	Response Act (AHERA).
Signature- LEA Design	ated Person

#### 4.2 Training

The required training for employees will be provided by Sterling Morton Elementary School.

- Sterling Morton Elementary School will ensure, prior to the implementation of the O&M program, that all members of its maintenance and custodial staff who work in buildings that contain asbestos-containing building materials receive asbestos awareness training of at least two hours whether or not they are required to work with asbestos-containing building materials. New custodial and maintenance employees will be trained within 60 days after commencement of employment.
- Sterling Morton Elementary School will ensure, prior to the implementation of the O&M program, that all members of its maintenance staff who conduct any activities that will result in the disturbance of asbestos-containing building materials receive the training as described in the paragraph above, plus fourteen additional hours of training.



#### 4.3 Notification

- 4.3.1 Sterling Morton Elementary School will ensure that all employees, workers, parent employee organizations, building occupants and/or their legal guardians will be informed at least once each school year about inspections, response actions and post response action activities, including periodic reinspection and surveillance activities that are planned or in progress. Notices to employees, building occupants, and/or their legal guardians will be distributed annually.
- 4.3.2 Sterling Morton Elementary School will ensure that short-term workers (e.g. telephone repair workers, utility workers, exterminators, etc.) who are likely to come in contact with asbestos-containing building materials are provided information regarding the location of asbestos-containing building materials, and materials assumed to contain asbestos in their intended work areas. (Non-LEA employees should sign the Asbestos Inspection & Management Plan acknowledging receipt of this information prior to the start of any work.)
- 4.3.3 Sterling Morton Elementary School will ensure that warning labels are posted in all routine custodial/maintenance areas in accordance with 40 CFR Part 763.95.
- 4.3.4 Sterling Morton Elementary School will ensure that proper notification is given as to the existence of their Asbestos Inspection & Management Plan, as provided in 40 CFR Part 763.93(g). The Asbestos Inspection & Management Plan will be available for public review in the school office (for that particular school only), during normal business hours. If requested, copies of the Asbestos Inspection & Management Plan will be submitted to the interested parties within five working days from the date of request. The school will charge a reasonable cost to make copies.



#### 4.4 Designated Person

Sterling Morton Elementary School will ensure that prior to the implementation of the Management Plan, the school's Designated Person receives adequate training to perform the duties assigned to him/her under AHERA. Training will include the following five topics: 1) health effects of asbestos; 2) detection, identification, and assessment of ACM; 3) options for controlling ACM; 4) asbestos management programs; and, 5) relevant Federal and State regulations.

#### 4.5 Conflict of Interest

Sterling Morton Elementary School will address the possible conflicts of interest which could result between parties providing services to the school when assisting with AHERA compliance. The following possible conflicts will be considered:

- The asbestos consulting company hired by the school to assure compliance with the AHERA regulations should be independent of the contractor hired to perform abatement activities.
- Air sample analyses as required by AHERA to determine abatement completion will be performed independently of the company and/or persons providing the abatement services.



#### 5.0 SCHOOL LIST

This Asbestos Inspection & Management Plan applies to those buildings used in the daily operation of the following school:

Sterling Morton Elementary School
 9292 Jordan Road
 Mentor, Ohio

The following categories of ACM are present in the building(s) of Sterling Morton Elementary School:

	Yes	No
Friable ACM	X	
Friable Assumed ACM	X	
Non-Friable ACM	X	
Non-Friable Assumed ACM	X	

The complete inventory of suspected ACM identified in the Sterling Morton Elementary School facilities is presented in  $\underline{\text{Table 3-1}}$  of the inspection report. The inspection report is presented in Part  $\underline{\text{I}}$  of this document.



#### 6.0 RECORDKEEPING

Available records related to preventive measures, response actions, employee training, cleaning, fiber release episodes, or operations and maintenance activities conducted prior to the 2010 inspection have been incorporated into the updated AHERA Asbestos Inspection & Management Plan. Documentation related to any future asbestos activities, including preventive measures, response actions, employee training, cleaning, fiber release episodes, or operations and maintenance activities conducted after the initial survey, will be kept in or filed with this Plan.



#### 7.0 CURRENT INSPECTION

The complete inventory of suspect asbestos-containing building materials identified during the development of the 2010 Asbestos Inspection and Management Plan for Sterling Morton Elementary School is presented in Part  $\underline{I}$  (Sections  $\underline{1}$  to  $\underline{3}$ ) of this document.



#### 8.0 LEA DESIGNATED PERSON

The person designated by Sterling Morton Elementary School to ensure that Section 763.84 of the AHERA regulation (40 CFR Part 763) is properly implemented will be:

Name:	
Address: (b) (6)	
Telephone:	
Course Name:	
Course Location:	
Course Dates:// and//_	

A Designated Person/O&M Worker Training course was designed to train persons to serve as the school's Designated Person as well as perform maintenance duties which may disturb asbestos-containing building materials. This course provided an in-depth discussion of the following topics.

- Health effects associated with asbestos exposure.
- Detection, identification, and assessment of ACM.
- Options for controlling ACM.
- Relevant Federal and State regulations (including those specified in AHERA).
- Information regarding asbestos and its various uses and forms.
- Locations of ACM identified throughout each building in which they work.
- Recognition of damage, deterioration, and delamination of ACM.
- The location and availability of the management plan.
- Descriptions of the proper methods of handling of ACM.
- Information on the use of respiratory protection (as specified in AHERA).
- Hands-on trains in the use of respiratory protection, other personal protection measures, and good work practices.





#### MATERIAL TYPE

Damaged or significantly damaged thermal system insulation (TSI) ACM.

## RESPONSE ACTION

- 1. At least repair the damaged area.
- 2. Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.
- 3. Maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition



## MATERIAL TYPE

Damaged friable surfacing ACM or damaged friable miscellaneous ACM

## RESPONSE ACTION

Can select from the following response actions:

Encapsulation

Enclosure

Removal

Repair



## MATERIAL TYPE

Significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM

#### RESPONSE ACTION

- 1. Immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment.
- 2. Remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.



#### MATERIAL TYPE

Friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that is in good condition but has *potential for damage* 

#### RESPONSE ACTION

At least implement an operations and maintenance (O&M) program



#### MATERIAL TYPE

Friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that is in good condition but has *potential for significant damage* 

# RESPONSE ACTION

- 1. Implement an O&M program
- 2. Institute preventive measures to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated.
- 3. Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health and the environment.

**Note:** Response actions including removal, encapsulation, enclosure, or repair, other than small-scale, short duration repairs, shall be designed and conducted by persons accredited to design and conduct response actions.



# 9.0 LEA ASSURANCE OF ACCREDITATION

Sterling Morton Elementary School will use only EPA accredited persons for AHERA related activities including inspections, management planning, response action design and implementation, O&M or response action procedures greater than small scale short duration, and periodic (3 year) reinspections.

Sterling Morton Elementary School may use unaccredited two-day trained personnel to perform small-scale, short-duration operations as defined in Appendix B to Subpart E of the Asbestos Hazard Emergency Response Act (AHERA). However, any scope of work greater than that described in Appendix B to Subpart E must be designed and conducted by accredited personnel.

Sterling Morton Elementary School may use unaccredited two-day trained personnel for the repair of damage caused by minor fiber release episodes (the falling or dislodging of 3 square or linear feet or less of friable ACM). However, accredited personnel must and will be used to design and conduct response actions for any major fiber release episode (the falling or dislodging of more than 3 square or linear feet of friable ACM) (769.91f).

LEA Designated Person	-	 
Signature		
Date		

The accreditation documents for the personnel used to develop this Asbestos Inspection & Management Plan are enclosed. Those persons used for other asbestos services at Sterling Morton Elementary School will submit their certificates of accreditation to the school. These certificates will be maintained in the asbestos Inspection/Management Plan file.



For each preventive measure and response action taken after April 2010, the following information will be documented and maintained in the school file.

- I. Detailed description of the action
  - a) Methods used
  - b) Location of measure or action
  - c) Start and completion date
  - d) Names and addresses of all Contractors involved
  - e) Accreditation agency (State and EPA approved)
  - f) Accreditation number
  - g) Storage and disposal site if ACM was removed
- II. The name and signature of any person collecting Final Clearance Air samples.
- III. Information about air samples:
  - a) Date of collection
  - b) Name and address of laboratory analyzing samples
  - c) Date of analysis
  - d) Results of analysis
  - e) Method of analysis
  - f) Name and signature of person performing analysis
  - g) Laboratory accreditation statement



# 10.0 ACM REMAINING FOLLOWING INITIAL RESPONSE ACTIONS

Most of the asbestos-containing building materials identified in Sterling Morton Elementary School and described in Table 3-1 of the inspection report are in good condition and in a non-friable state, and no initial response actions are required [ANY EXCEPTIONS ARE NOTED ON THE ASBESTOS INSPECTION DATA SHEET FORMS IN APPENDIX C AND SHOULD BE ADDRESSED AS APPROPRIATE]. As ACM is removed during response actions, O&M, or small-scale short-duration activities, inventory sheets shall be updated and documentation associated with these activities shall be kept on file in an organized fashion.



# 11.0 REINSPECTION SCHEDULE

Sterling Morton Elementary School will visually reinspect all areas identified in the Asbestos Inspection & Management Plan as asbestos-containing, and will document any "change in condition" every six (6) months. The person performing the surveillance will be required to record the date of surveillance, his/her name, and any changes in the material's condition. The surveillance reports must be submitted to LEA Designated Person, and be included as a part of the records in the current Asbestos Inspection & Management Plan.

Reinspections will be conducted every three (3) years by an EPA-accredited Inspector (Asbestos Hazard Evaluation Specialist). The reinspection will assess any changes in the physical appearance of the asbestos-containing building material, and will serve as the new asbestos inspection.

Documentation of six (6)-month periodic surveillance inspections and three (3)-year reinspections will be maintained in the school office Asbestos Inspection & Management Plan file. At a minimum, the documentation will include the name and date of the surveillance/reinspection, any changes in the material condition noted, and recommended response actions to correct the damaged materials noted.



## 12.0 O&M PROGRAM

Sterling Morton Elementary School will implement an operations, maintenance, and repair (O&M) program per 40 CFR 763.91 for all known and assumed friable asbestos-containing building materials. Materials identified as non-friable will be treated as friable if the material becomes friable during future building or maintenance operations.

The O&M Program can be implemented through the school's maintenance and custodial staff and/or an accredited asbestos abatement contractor. The O&M program will include training, cleaning, work practices, periodic inspections, and fiber release episode reporting.

The O&M Program is designed to accomplish the following:

- To clean up asbestos fibers previously released.
- 2) To prevent future releases by minimizing disturbance or damage to asbestos-containing building materials.
- To monitor the condition of asbestos-containing building materials. The O&M Program should be established for this building and should continue until all such materials have been removed.

The primary elements of an O&M Program are as follows:

- Documenting the exact location and condition of asbestos-containing building materials. This Asbestos Inspection & Management Plan provides this documentation.
- 2) Training of all maintenance and custodial personnel in special work practices to be applied when handling or working around ACM.
- 3) If necessary, performing an initial cleaning of all building areas near friable ACM. Wet cleaning and HEPA-filtered vacuum techniques should be used.
- 4) Re-inspecting all ACM and re-assessing the condition of these materials periodically as specified in the management plan for this building.

All O&M activities will be reported on standardized forms. The form to be completed will vary if the O&M activity is performed by properly trained in-house school personnel or by a licensed asbestos abatement contractor. Records of each O&M activity will be maintained in the school's asbestos file.



The following information about O&M small-scale, short duration maintenance activities performed after April 2010 will be documented and maintained in the school file:

- Name of each person performing the operation
- Start and completion date of activity
- Location where activity occurred
- Description of the activity, including preventive measures used
- If ACM was removed, the name and location of the storage or disposal site.

#### 12.1 O&M Work Practices

Sterling Morton Elementary School will ensure that the following work practices are used when performing operations and maintenance (O&M) activities involving small scale ACM abatement:

- 1) Restrict entry to the work area of persons other than those necessary to perform the maintenance project. This will be done by physically isolating the area or by scheduling of personnel.
- 2) Post signs to prevent entry by unauthorized persons.
- 3) Restrict sources of air movement, including shutting off the air handling system or temporarily modifying air supply diffuser and returns.
- 4) Use work practices or other control methods, such as wet methods, protective clothing, HEPA vacuums, mini-enclosures and glove bags, for cleaning the work area and to inhibit the spread of any released asbestos fibers.
- 5) Wet clean all fixtures, components and horizontal surfaces in the immediate area of concern.
- 6) Place ACM debris and cleaning materials in a sealed and leak-tight container, properly labeled with an affixed asbestos warning tag.
- 7) Prior to initiation of work, submit an asbestos Work Permit for repairs which involve the disturbance of ACM or assumed ACM. A copy of the permit is attached. The permits are to be submitted to the Designated Person of the LEA, who will review the permit, physically inspect the area, and issue or deny the work permit.



Small scale asbestos O&M work may be performed by trained (16-hour) in-house maintenance personnel or by accredited asbestos abatement contractors. Major repair or removal will always be conducted by accredited asbestos contractors who will observe all laws and regulations and AHERA. O&M small-scale, short duration maintenance activities are tasks such as, but not limited to:

- a. Removal of asbestos-containing insulation on pipes.
- b. Removal of small quantities of asbestos-containing insulation on beams or above ceilings.
- c. Replacement of an asbestos-containing gasket on a valve.
- d. Installation or removal of a small section of drywall.
- e. Installation of electrical conduits through or proximate to ACM.
- f. Removal of small quantities of ACM only if required in the performance of another maintenance activity not intended as asbestos abatement.
- g. Removal of asbestos-containing thermal system insulation not to exceed amounts greater than those which can be contained in a single glove bag.
- h. Minor repairs to damaged thermal system insulation which does not require removal.
- i. Repairs to or drilling into asbestos-containing wallboard or plaster.
- j. Repairs involving encapsulation, enclosure, or removal, to small amounts of friable ACM only if required in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those which can be contained in a single prefabricated mini-enclosure. Such an enclosure shall conform spatially and geometrically to the localized work area, in order to perform its intended containment function.

# OPERATIONS AND MAINTENANCE (O&M) ASBESTOS WORK PERMIT (in-house asbestos work)

(SCHOOLS MUST COMPLETE THIS FORM EACH TIME THEIR EMPLOYEE WORKS WITH ASBESTOS)

1) TYPE OF ASBESTOS WORK ACT	IVITY:	
	VE ENCAPSULATE ENCLOSE	ISOLATE
2) AMOUNT OF MATERIAL TO BE	DISTURBED:	·
Less than three (3) square or thr	ee (3) linear feet.  epairs each less than (3) square or linear feet)	
Cleaning	cpans each less than (3) square or linear feet)	
3) EMPLOYEES NAME: (THE PERSON DOING THE WORK)	(DDD III)	
(THE TERSON DOING THE WORK)	(PRINT)	
4) SUPERVISORS NAME:		-
(DESIGNATED PERSON)	(PRINT)	
5) DATE & TIME OF THE WORK: 1	DATE:/_/ TIME: FROM	TO
.,	THAE. TROW	_ 10
6) LOCATION: SCHOOL NAME	BUILDING	
ADDRESS		
BASEMENT GROUND FLOO	OR 2ND 3RD 4TH_	_
CLASSROOM(# ) ST	AIRWELL LIBRARY	HALLWAY
CAFETERIA KI	TCHEN AUDITORIUM	LOUNGE
GYMNASIUM LC	CKER RM.(B) LOCKER RM.(G	OFFICE
MUSIC RM LA	VATORY (B) LAVATORY (G)	CUSTODIAL RM
TUNNEL BC	VILER RM STORAGE RM	OTHER
CONTAINMENT REST SHUT DOWN OR MODIFIED 8) TYPE OF MATERIAL: Thermal	D HEPA VACUUM GLOV RICTED ACCESS POSTED SIGN HEATING AND VENTILATING SYSTEM Surfacing	S Miscellaneous
(pipe, boile 9) WORK DESCRIPTION AND RATI	r, etc.) (sprayed/troweled) ONALE:	floor tile, ceiling tile, etc.)
The state of the s		
10) WASTE STORAGE OR DISPOSA	L SITE:	<u> </u>
12) WORK PERMIT APPROVED: _	(yes) (no)	
SIGNATURE	DATE	
	IGNATED PERSOND	

# CONTRACTED ASBESTOS ABATEMENT PROJECT WORK PERMIT

(Schools must complete this form for each contracted asbestos project)

SCHOOL NAMEADDRESS	BUILDING NAME	·
1) TYPE OF ACTIVITY CLEAN REPAIR	: REMOVE ENCAPSULATE ENCLOSE ISOL	ATE
2) AMOUNT OF MATER Less than (3) square or	RIAL DISTURBED: TOTAL FOOTAGE: Sq. Ft / Lr. (3) linear feet Sq. etc	ı. Ft.
3) CONTRACTOR:	NAMEADDRESS	
4) CONTRACTOR'S AS	BESTOS LICENSE #EXPIRATION DATE/_/_	
5) DATE OF THE WOR	K ACTIVITY: START / / STOP / /	
6) EPA NOTIFICATION	COMPLETEODH NOTIFICATION COMPLETE	
CLASSROOM (# CAFETERIA GYMNASIUM MUSIC RM TUNNEL 8) CONTRACTOR'S PR	KITCHEN AUDITORIUM  LOCKER RM.(B) LOCKER RM.(G)  LAVATORY (B) LAVATORY (G)  BOILER RM. STORAGE RM.  OJECT SUPERVISOR: ODH#	CUSTODIAL RM OTHER
10) WORK METHODS: CONTAINMEN	OJECT WORKERS (ALL):  WET METHOD HEPA VACUUM GLOVEBAG T RESTRICTED ACCESS POSTED SIGNS OR MODIFIED HEATING AND VENTILATING SYSTEM	
11) TYPE OF MATERIA (pipe, boiler, etc.) 12) WORK DESCRIPTIO	(sprayed/troweled) (floor tile, ceiling tile, etc.)	eous
Person performing fina Visual inspectio (final clearance	E AIR SAMPLING AND VISUAL INSPECTION: al visual inspection: n date:// air samples are required for projects greater than 3 feet) me & address)	. ,
Sample collection SAMPLE TYPE Sample Results:	Sample analysis date/_/   E: PCM _ TEM _ Method NIOSH 7400 AGGRESSIVE	
SIGNATURE	Designated Person )	

Co	ontracted Asbestos Abatement Project		Date//_	
SC	HOOL NAME			
	ADDRESS	BUILDING NAME		
(Th	e school must obtain a copy of the following items from every contracted asbestos project.)	the contractor or laboratory a	and keep them o	n file for each
CO	NTRACTOR			
1)	Contractor's Liability Insurance		•	
2)	Performance Bond (if required)			
3)	Contractor's Worker Compensation Certificate			
4)	Contractor's Asbestos Abatement License	·		
5)	Ohio Department of Health Notification	<u> </u>		
6)	EPA Notification (NESHAP)	· ·		
7)	Affidavit of Contractor			
8)	Waste Transport Manifests			*
9)	Landfill Disposal Papers			
10)	Workers' Training Certificates (for each and every worker and supervisor)			
11)	Workers' Medical Papers (for each and every worker and supervisor)			
12)	Workers' Safety and Health Agreement Forms (for each and every worker and supervisor)		·	
13)	Contractor's Work-site Entry and Exit Log			
14)	Contractor's Progress Reports (daily)			
15)	Contractor's OSHA Air Sampling Reports			
16)	Certification of Final Visual Inspection (This form should include: The location and date of final visual inspection, and signatures of the contractor and laboratory that performed it.			
LA	BORATORY			
17)	Independent Clearance Air Sample Reports (applies to a (The school <u>must</u> use an independent laboratory. Do not a and pay for the lab. You must have a minimum of FIVE (This report will come from the lab and must include: The san the persons that performed sample collection and sample analyses.	allow the contractor to hire this 5) samples each less than 0.01 apple results; the dates of collecti	fibers per cubic c on and analysis; th	entimeter.
18)	Independent Daily Air Monitoring Reports			

# CERTIFICATION OF VISUAL INSPECTION

SCHO	OL NAME					
ADDR	ESS					
	<u></u>					
WORK	AREA LOCATIO	ON		·	•	
		<del></del>	-			***************************************
		_				
				***************************************		···-
CONTI	RACTOR'S CERT	TFICATION		÷		
stringer surface	nt criteria agreed	upon, the contract beams, ledges, wa	or hereby certifies	ons, codes, standards that they have visua or, Decontamination U	lly inspected the wo	rk area (all
by	(Signature)			Date//	<del></del>	
	(Print Name)					
	,					
	(Print Title)					
		,				
INDEP	ENDENT PROFE	SSIONAL AIR S	SAMPLING LABO	RATORY'S CERTIF	ICATION	
visual i	nspection and veri	onal Air Sampling I fies that this inspec- bove is a true and h	ction has been thor	certifies that they have ough and to the best o	accompanied the conf their knowledge and	ntractor on a d belief, the
by	(Signature)			Date//		
	(Print Name)					
	(Print Title)					

# SAFETY AND HEALTH AGREEMENT FORM

		(this form or e		
Employee's Na	ime:	S	Soc. Sec. No	
Employer:				
Employee's Tr	aining Classification:			
_			•	
I	(employee)		$\_$ , understand t	hat the work
	(employee)			
project at:				
			• •	
(the "Project")	scheduled to begin			involves the abatement
		(month)	(year)	
employer has and working co	agreed to supply all the ne	cessary medical mor ct my health and saf	nitoring services, ety during my en	e. Additionally, I understand that my training, personal protective equipment nployment on the "Project".
	•		(school)	
commencemen	tof work at the "Project" in	and health service acluding but not limi	es, as required by ted to the following	y Federal, State, local law, prior to my ing safety and health services:
1.	A free physical examination Medical Surveillance Progra	in the past year by a p	hysician, and a pri	nted copy of the asbestos
2,	Training in the following su	· ·		
	(a) History, properties and uses of asbestos; (b) Recognition of asbestos, including its physical			
	characteristics; (c) Health ha	zards, including the re	lationships betwee	en asbestos exposure, smoking,
	and disease; (d) Worker pro	ection, including respi	rator protection, pr	rotective clothing, safety
	equipment, air monitoring, medical surveillance, and personal hygiene; (e) A detailed description of			
	respirators and their use and care, including the degree of protection afforded, fitting and testing			
	procedures, and maintenance and cleaning; (f) Work practices including area preparation,			
	decontamination and waste disposal; (g) Worker right of access to medical records and records			edical records and records
	required to be maintained by	employer; (h) Requir	ements, procedures	s, and standards established by
	40 CFR Part 763, and appro	priate state, local and I	Board statutes and i	regulations;
3.	Personal instruction and trai	ning on the proper use	and fit testing of re	espirators and instruction on the
	limitations of their use and a			and standard operating
	procedures for the selection,	use, care, and inspect	ion of respirators.	
x c . a				
safety and hea	let represent that I will could be affecting my	nply with all Federa work activities on the	al, State and loca the "Project".	al laws and regulations pertaining to the
Sign:	Deta	Sion.		That
	Employee	Sign:	Employer	Date
,	ompio j oc		Employer	



# 12.2 Training

All the maintenance and custodial staff of Sterling Morton Elementary School will receive a two-hour training session on asbestos awareness prior to implementation of the O&M provisions of the management plan (40 CFR 763.92). New employees will be trained within sixty days after employment. Documentation of personnel training will include at minimum the name; date of training, location of training, and the number of training hours completed.

Two-hour training will include the following:

- 1) Information on asbestos uses and occurrence.
- 2) Information on the health effects of asbestos exposure.
- 3) Locations of ACM identified in the building.
- 4) Information to recognize damage, deterioration and delamination of ACM.
- 5) Name, telephone number and location of the LEA designated person.
- 6) Location and availability of the AHERA Inspection Management Plan.

All the maintenance staff of Sterling Morton Elementary School will receive 14 additional hours of training if in the performance of their duties they are likely to disturb asbestos-containing building materials. Documentation of this training will be as described in the paragraph above.

The additional 14-hour training will include the following:

- 1) Description of the proper handling of ACM.
- 2) Information on the use of respiratory equipment as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry.
- 3) The provisions of 40 CFR part 763.92 and Appendices A, B, C, and D of Subpart E, 40 CFR part 763, Subpart G, and in 40 CFR, Part 6, Subpart M, and OSHA regulations contained in 20 CF 1926.58.
- 4) Hands-on training in the use of respiratory protection, other personnel protective measures, and good work practices.
- 5) Hands-on training in the use of glove-bags and other specialized tools and equipment of the trade to address the ACM at the school.



# 12.3 Minor Fiber Release Episode

Using properly trained personnel, Sterling Morton Elementary School will ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., the falling or dislodging of 3 square or linear feet or less of a friable ACM):

- 1) Thoroughly saturate the debris using wet methods.
- 2) Clean the area, using wet methods and HEPA vacuuming.
- 3) Place the asbestos debris in a sealed, leak tight container, and affix warning tag.
- 4) Repair the area of damaged ACM with materials such as asbestos-free spackling, cement, plaster, re-wettable cloth, or insulation, or seal with an approved encapsulant or latex paint.

# 12.4 Major Fiber Release Episode

Sterling Morton Elementary School will ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., the falling or dislodging of more than 3 square or linear feet of friable ACM).

- 1) Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.
- 2) Shut off or temporarily modify the air handling system to prevent the distribution of fibers to other areas in the building.
- 3) The response action for major fiber release episodes will be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.

When a major asbestos activity is performed, the following must be documented and maintained in the school file:

- Name, signature, state of accreditation, certificate number of each person performing the activity.
- Start and completion date of the activity.
- Location where activity occurred.
- A description of the activity, including preventive measure used.
- If ACM was removed, the name and location of storage disposal sites.



For each fiber release episode the LEA must document and maintain in the school office file the following:

- Date and location of the episode.
- Method of repair, preventive measures taken, or response actions taken.
- Name of each person performing the work.
- The name and location of the storage and disposal site, if ACM is removed.



# ASBESTOS FIBER RELEASE EPISODE

DATE \_\_/\_\_/\_

(ACCIDENTAL OR UNCONTROLLED)

1) AMOUNT OF MATERIA	L INVOLVED:		
Greater than three (3)		MAJOR ) REE (3) SQUARE OR THREE I	
	RESPONDED TO BY	16 HR. O&M TRAINED PERSO	NNEL)
2) DATE AND TIME OF EP	ISODE:		
DATE:// TIME:		•	
3) LOCATION: SCHOOL 1		BUILDING NAME	
BASEMENT GRO	OUND FLOOR 2ND	3RD 4TH	· ,
CLASSROOM (# ) CAFETERIA	STAIRWELL KITCHEN	LIBRARY AUDITORIUM	HALLWAY LOUNGE
GYMNASIUM MUSIC RM	LOCKER RM.(B) LAVATORY (B)	LOCKER RM.(G) LAVATORY (G)	OFFICE CUSTODIAL RM
TUNNEL	BOILER RM	STORAGE RM	OTHER
4) TYPE OF MATERIAL:			·
Thermal	Surfacing	Miscellaneous	
(pipe, boiler, etc.)	(sprayed or troweled)	(floor tile, ceiling tile, etc.)	
5) EPISODE DESCRIPTION	AND RATIONALE:		
6) EPISODE RESPONSE:			The second secon
Evacuated Area Posted Signs		rea Restricted Access Ventilation Systems (heat, AC,	etc.)
7) ISSUED WORK PERMIT	: O&M	Contractor ( If the episode involves mo	ore than three (3) feet of material, a must be used.)
SIGNATURE(DESIG	GNATED PERSON)	DATE//	



#### 13.0 NOTIFICATION

School Employees
Building Occupants or Their Legal Guardians
Parent, Teacher, Employee Organization

All school employees, workers, building occupants or their legal guardians and parent, teacher, and employee organizations will be informed at least once each school year concerning the availability of the Asbestos Inspection & Management Plan, the location and times for its review, inspection, response actions, and post-response action activities, including periodic reinspections and surveillance activities that are planned or in progress. Yearly notices must be sent even if there is no evidence of asbestos in the building.

This information will be distributed in the form of a letter and a dated copy letter will be kept in the Asbestos Inspection & Management Plan file.

#### **Contractors/Short Term Workers**

All contractors and short-term workers who may come in contact with asbestos in the school, such as telephone repair workers, utility workers and such, will be informed of the locations of the ACM or assumed ACM in the building prior to commencement of work activities.

The contractor or short-term worker will be required to review a copy of the Asbestos Inspection & Management Plan, (specifically Table 3-1) relating to their proposed work activities. Prior to commencement of work, the contractor or short-term worker will be required to verify their review and understanding by signing the Asbestos Inspection & Management Plan.



# 14.0 COMMUNICATION PLAN

The following sample letter, or some similar letter, will be distributed by Sterling Morton Elementary School once each year, and a dated copy will be maintained on file. Additionally, Sterling Morton Elementary School will attach to this letter a list of the asbestos abatement projects, if any, that the school undertook in the past year; and a list of the asbestos abatement projects, if any, planned for the near future. This letter provides information about the availability of the Asbestos Inspection & Management Plan, the location and times for its review, inspections, response actions, and post-response action activities, including periodic reinspections and surveillance activities that are planned or in progress. A yearly notice will be sent even if there is no evidence of asbestos in the building.

The following is an example of the letter that can be completed and distributed.



To: Employees, Parents, Parent & Teacher Organizations, Building Occupants or their Legal Guardians

From: Sterling Morton Elementary School

Subj: Asbestos Inspection & Management Plan

Date: / /

Dear Sir/Madam,

Federal law required all schools to inspect their buildings for ACM and to develop Management Plans for those materials found. Our school contracted EA Group to conduct an Asbestos Inspection and to develop an Asbestos Management Plan.

The Asbestos Inspection & Management Plan is available for your review, by appointment, during our regular business hours. If you wish to see the report, please contact the school office for an appointment. All appointment requests will be honored within five (5) working days of their receipt. A written copy of the Asbestos Inspection & Management Plan can be made available upon written request, for the cost of reproduction.

Our school's maintenance and custodial staff has received specialized asbestos training and will visually survey the school's asbestos-containing building materials every six (6) months. Furthermore, a complete re-inspection by an EPA accredited inspector will occur every three (3) years. Copies of these inspections can also be made available for your review.

If our school requires an asbestos abatement larger than small scale short duration, only an EPA accredited asbestos contractor will be used. Attached, you will find a list of the asbestos abatement projects, if any, that our school undertook this past year, and a list of the asbestos abatement projects, if any, planned for the near future.

Please be assured that we are concerned with your safety and will make every effort to comply with all laws and regulations pertaining to asbestos.

Sincerely,

School Administrator



# 15.0 RESOURCE EVALUATION

Sterling Morton Elementary School will budget in a timely manner the necessary resources to complete any recommended response actions sufficiently to protect human health and environment as required by the Asbestos Hazard Emergency Response Act (40 CFR Part 763.93).



# 16.0 MANAGEMENT PLAN CONTRIBUTIONS

The following accredited individual contributed to the development of the Asbestos
Inspection & Management Plan for Sterling Morton Elementary School. The certificate for this
person follows.

Name: Scott Landis

Signature

Date 04 / 08 / 10

Accreditation Course Name: Asbestos Building Inspector /

Asbestos Management Planner

Training:

Initial Training:

Cincinnati Asbestos Training Institute

University of Cincinnati, Ohio

Certificate Numbers:

BI- <u>700</u>

MP- <u>674</u>

Refresher Training:

Training Services International

Certificate Numbers:

BI- 9 TSI 30745 ir

MP- 9 TSI 30746 mpr

State AHES Number: 31801



# 17.0 COMPLIANCE TO GENERAL RESPONSIBILITIES

# AHERA ASBESTOS HAZARD EMERGENCY RESPONSE ACT

LOCAL EDUCATION AGENCY Sterling Morton Elementary School

> SPECIAL PROVISION CERTIFICATION 763.93i

# COMPLIANCE TO GENERAL RESPONSIBILITIES:

I hereby certify that this Local Educational Agency (LEA)

Mentor Public Schools
[District Name]

has complied with U.S. Environmental Protection Agency regulation 40 CFR 763, Subpart E; has completed the required inspections, prepared their asbestos management plan; and have met the general requirements of this regulation.

The	e above statement is true and correct to the best of my knowledge:
by	on
	(SIGNATURE OF LEA DESIGNATED PERSON)
ΓY	PED NAME
ΤIΊ	TLE



#### 18.0 GLOSSARY

Asbestos - the asbestiform varieties of: chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite.

Asbestos-Containing Material (ACM) - any material or product containing more than one (1) percent asbestos.

# Condition of Surfacing and Miscellaneous Material:

# A. Poor Condition (equivalent to "significantly damaged")

Material with one or more of the following characteristics:

- 1. Surface crumbling or blistering over at least one tenth of the surface if the damage is evenly distributed (one quarter if damage is localized).
- 2. Large areas of material hanging from the surface, delaminating, or showing adhesive failure.
- 3. Water stains, gouges, or mars over at least one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized)

Accumulation of powder, dust, or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

# B. Fair Condition (equivalent to "damaged")

Material with the following characteristics:

1. The surface crumbling, blistered, water-stained, gouged, marred or otherwise abraded over less than one tenth of the surface if the damage is evenly distributed (one quarter if the damage is localized).

Accumulation of powder, dust, or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

#### C. Good Condition

Material with no visible damage or deterioration, or very limited damage or deterioration.



# **Condition of Thermal System Insulation:**

# A. Poor Condition (equivalent to "significant damage")

Material with one or more of the following characteristics:

- 1. Mostly missing jacket
- 2. Crushed, heavily gouged or punctured insulation on at least one tenth of pipe runs/risers if the damage is evenly distributed (one quarter if the damage is localized).

Accumulation of powder, dust, or debris similar in appearance to the suspect material on surfaces beneath the pipe/boiler/tank/etc. can be used as confirmatory evidence.

# B. Fair Condition (equivalent to "damaged")

Material with the following characteristics:

- 1. A few water stains or sections of missing jackets.
- 2. Crushed insulation or water stains, gouges, punctures, or mars, on up to one tenth of the insulation if the damage is evenly distributed (or up to one quarter if the damage is localized).

#### C. Good Condition

Material with no visible damage or deterioration, or very limited damage or deterioration.

**Encapsulation** - treatment of ACM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

Enclosure - an airtight, impermeable, permanent barrier around ACM to prevent the release of asbestos fibers into the air.

**Fiber Release Episode** - any uncontrolled or unintentional disturbance of ACM resulting in a visible emission.

**Friable** - material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes



damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.

Functional Space - a room, group of rooms, or homogeneous area (including crawl spaces or the space between a drop ceiling and the floor or roof deck above), such as classroom(s), cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

Homogeneous Area - an area of surfacing material, thermal system insulation, or miscellaneous material that is uniform in color and texture.

**Miscellaneous Material** - interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.

**Non-friable -** material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.

**Operations and Maintenance Program** - a program of work practices to maintain friable ACM in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACM disturbance or damage.

#### Potential for disturbance:

High

# A. Potential for contact with the material

week.

(and/or)

The material is in a public area (e.g., hallway, auditorium etc.) and

Service workers work in the vicinity of the material more than once per

accessible to building occupants.

Moderate Service workers work in the vicinity of the material once per week to once

per month.

(and/or)

The material is in a room or office and accessible to the occupants.

**Low** Service workers work in the vicinity of the material less than once per

month.

(and/or)

The material is visible but not within reach of building occupants.



# B. <u>Influence of vibration</u>

**High** Loud motors or engines present (e.g., some fan rooms).

(and/or)

Intrusive noises or easily sensed vibrations (e.g., major airports, a major

highway).

Moderate Motors or engines present but not obtrusive (e.g., ducts vibrating but no fan

in the area).

(and/or)

Occasional loud sounds (e.g., a music room)

**Low/None** None of the above

# C. Potential for air erosion

High velocity air (e.g., elevator shaft, fan room).

Moderate Noticeable movement of air (e.g., air shaft, ventilator air steam).

**Low/None** None of the above

**Removal** - taking out or the stripping of substantially all ACM from a damaged area, a functional space, or a homogeneous area in a school building.

Repair - returning damaged ACM to an undamaged condition or to an intact state so as to prevent fiber release.

**Response Action** - a method, including removal, encapsulation, enclosure, repair, operations and maintenance, that protects human health and the environment from friable ACM.

Routine Maintenance Area - an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

Surfacing Material - material in a school building that is sprayed-on, troweled on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

**Thermal System Insulation** - material in a school building applies to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.